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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,504	08/18/2003	Naoki Matsuhira	122.1562	1724
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STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			EXAMINER HOMAYOUNMEHR, FARID	
			ART UNIT 2439	PAPER NUMBER
			MAIL DATE 06/22/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/642,504

**Applicant(s)**

MATSUHIRA, NAOIKI

**Examiner**

Farid Homayounmehr

**Art Unit**

2439

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 8-10 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-10 and 12-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/08)  
Paper No(s)/Mail Date multiple.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application.
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This action is responsive to communications: application, filed 8/18/2003; amendment filed 4/3/2009.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/3/2009 has been entered.
3. Claims 1-5, 8-10, 12-14 are pending in the case. Claims 6, 7, and 11 are cancelled by the applicant.

#### ***Response to Arguments***

4. Applicant's arguments, filed 4/3/2009, with respect to establishment of invention prior December 29, 2000, which is the filing date of the cited reference Christensen (U.S. Patent No. 7,292,530) have been fully considered, but are not persuasive. The

effective filing date of Christensen for the purpose of 103(a) rejection is still valid for rejection of claims 1-5, 8-10, and 12-14 for the following reason.

***Ineffective Declaration***

5. Applicants have submitted one Declaration of Inventor under 37 C.F.R. 1.131, to establish a date of invention prior to filing date of Christensen. The declaration includes three exhibits.

**Requirements for Conception:**

6. The evidence submitted is insufficient to establish a conception of the invention prior to the effective date of the US Patent No. 7,292,530 reference because of the following reasons. While conception is the mental part of the inventive act, it must be capable of proof, such as by demonstrative evidence or by a complete disclosure to another. Conception is more than a vague idea of how to solve a problem. The requisite means themselves and their interaction must also be comprehended. See *Mergenthaler v. Scudder*, 1897 C.D. 724, 81 O.G. 1417 (D.C. Cir. 1897). Exhibit I, and particularly its translation, are considered as evidence related to the requirements of conception. Other exhibits are considered relative to requirements of due diligence only, because Exhibits II and III only include filing information, and do not include any information relative to the claimed subject matter.

6.1. With regards to Exhibit I and its translation, applicant has chosen to redact all dates on the Exhibit. Therefore, Exhibit I fails to establish a date of conception as a verifiable fact.

Furthermore, Exhibit I, and applicant's mapping of its teaching in pages 2 to 5 of the declaration fails to support all claim requirements as requires by section 112, first paragraph. Following is some examples claim requirements without proper support:

6.1.1. The requirement of preventing the filtering information from being encrypted, as required by claims 1-5, etc.

6.1.2. The requirement of filtering information is used for identifying a specific value showing VoIP performing a VoIP communication, as required by claims 1-5, etc.

6.1.3. The requirement of an authentication apparatus for receiving user authentication information input from a user receiving filtering service, authenticating a user, and assigning and distributing a filter key as filtering information corresponding to a user authentication information to the user after user authentication, as required by claims 8-10, etc.

6.1.4. Claim 5 is not discussed at all.

Note that section 112, first paragraph requires both description and enablement for each claim feature. A comprehensive disclosure of invention as claimed must be presented to satisfy the requirement of conception.

**Requirements for Diligence and Constructive Reduction to Practice:**

7. The evidence submitted is insufficient to establish due diligence from the time the invention was conceived (conceptual reduction to practice) until the date of filing (constructive reduction to practice) because of the following reasons.

7.1. Exhibits II and III are considered as evidence for due diligence. Applicant does not specify a date of conception. Therefore, it is impossible to determine compliance with due diligence from the date of the conception to the date of constructive reduction to practice.

7.2. The dates of Exhibits II and III are declared to be 1/19/2001, February 1, 8, 9, 14, and 19, 2001, 2/19/2002, 8/15/2003, and 8/18/2003. There is no evidence of due diligence for the period between 2/19/2001 to 2/19/2002, or 2/19/2002 to 8/15/2003, which amounts to a gap of more than one year. Note that the Requirements of Due Diligence are satisfied when there is continuous work performed during the critical period.

8. Based on the above discussion, applicants' argument relative to requirements of Conception and Due Diligence being satisfied is not persuasive.

**Information Disclosure Statement PTO-1449**

9. Information Disclosure Statements submitted on 3/16/2009 were considered. See attached PTO-1449 forms.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-5, 8-10, 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arrow et al. (US Patent No. 6'154'839, dated Nov. 28, 2000) in view of Christensen (US Patent No. 7'292'530, filed Dec. 29, 2000), hereinafter called Chris.

11.1. As per claim 1, Arrow is directed to a packet filtering method characterized by storing filtering information for use in filtering at a receiving side in an encrypted packet to be sent to the receiving side and sending it from a sending side (col. 6 lines 46-60

shows the encryption and authentication information is added to a packet at sending side, and verified at the receiving side. In addition, col. 12 lines 35-46 show that packets are decrypted after they are authenticated, and therefore, it shows packets were encrypted. Also Arrow teaches that if the packets are not authenticated they are filtered out), wherein an Ipv6 extended header added to an Ipv6 header or in a flow label region in an Ipv6 header is used to transmit the filtering information as to prevent the filtering information from being encrypted, when the packet is a packet in compliance with Ipv6 (Fig. 8 and associated text shows the filtering data is placed in the address field of a packet. Arrow Fig 9 and associated text shows that user ID information, which is used for authentication (filtering) is put in the header of a packet. Address field of packets, such as IP packets are in the packet header. Column 6 lines 21-35 teach IP packets as examples for implementation of invention. It also explicitly teaches to use the technique regardless of the current version of IP protocol (col. 6 lines 30-35), which was Ipv6 at the time of invention. Ipv6 was well known at the time of invention. Therefore, Arrow teaches putting filtering information in a header of a packet and also suggests using IP packets for implementation. Therefore, Arrow makes it obvious to put the filtering information in the header of an Ipv6 packet header. Also, as mentioned above, Arrow teaches authenticating the packet before decrypting it. Therefore, the authentication information (filtering info) was not encrypted).

Arrow does not explicitly teach said filtering information is used to identifying a specific value showing a VoIP performing a VoIP communication. Chris is directed to a method



of improving network performance by recognizing high priority packets from information in the packet header, and process high priority packets accordingly. In particular, Chris col. 8 lines 25 to 43 shows VoIP packets are recognized (filtered) from header information and given higher priority. Also, Chris col. 10 line 63 to col. 11 line 10 shows that the operating parameter in the header is a VoIP identifier. Therefore, Chris teaches filtering information is used to identifying a specific value showing a VoIP performing a VoIP communication, and uses this information to prioritize the service. At the time of invention, it would have been obvious to the one skilled in art to enhance Arrows system which stores filtering information in the header of an encrypted packet by including filtering information to filter VoIP packets as taught by Chris. The motivation to do so, is as stated by Chris (e.g. abstract) would be to enhance the quality of service of the network by prioritizing more sensitive packets such as VoIP packets.

11.2. As per claim 2, Arrow in view of Chris is directed to a packet filtering method characterized by, receiving an encrypted packet at the receiving side, from a sending side, detecting filtering information stored in that packet (see response to claim 1), holding predetermined filtering information of the receiving side, comparing filtering information of the sending side detected from the packet with the filtering information of the receiving side, and, when the two do not match, discarding that packet (for example, col. 8, lines 4-23, or col. 6, lines 45-60), wherein an Ipv6 extended header added to an Ipv6 header or in a flow label region in an Ipv6 header, is used to transmit the filtering information so as to prevent encrypting the filtering information when the packet is a

packet in compliance with Ipv6, wherein said filtering information is used to identify a specific value showing a VoIP performing VoIP communication (see response to claim 1).

11.3. As per claim 4, limitations of claim 4 are substantially the same as claim 1, and note that the comparing function unit is equivalent to the authenticating unit of Arrow as shown in col. 12 line 21-34.

11.4. As per claim 5, Arrow in view of Chris is directed to a communication equipment as set forth in claim 4, characterized in that: the equipment is provided with a buffer for temporarily storing a received packet passing through the filter key detecting unit and in that the comparing function unit is comprised of: a filter key table holding a predetermined plurality of different filter keys (col. 7, lines 40-55), a search unit for searching if there is a filter key matching with a filter key detected by the filter key detecting unit in the filter key table and when there is none, outputting a discard command, and a buffer control unit for receiving the discard command and controlling the system so as to discard the packet stored in the buffer (see response to claim 3).

11.5. Limitations of claims 3, 7-10 and 14 are substantially the same as limitations of claims 1, 2, 4 and 5 above. Note that per col. 12 lines 20-35, the user is authenticated in advance and have received proper authentication information to include in the packet user ID field. This authentication information is used by the firewall to authenticate

user's packet. Note also that the functionality and hardware required to hold the filter keys and storing them is inherent to Arrow's system. Also note that Arrow col. 7 lines 40-55 teach that the equipment is provided with a buffer for temporarily storing a received packet passing through the filter key detecting unit and in that the comparing function unit is comprised of a filter key table holding a predetermined plurality of different filter keys.

11.6 As per claim 12, Arrow in view of Chris is directed to a communication equipment as set forth in claim 4, wherein an authentication apparatus is further included, the authentication apparatus having: a filtering authentication function unit for receiving user authentication information input from a user receiving a filtering service and authenticating the user (Arrow col. 7 lines 30-40); and a filter key providing function unit for assigning and distributing said filter key to be stored in a packet corresponding to the user authentication information to the user after the authentication at the filtering authentication function unit (Arrow's claim 4 and also see Fig. 9 and associated text).

11.7. As per claim 13, Arrow in view of Chris is directed to a communication equipment as set forth in claim 12, wherein said filtering authentication function unit has: a user authentication database in which user authentication information is registered in advance, and a decision unit for determining the veracity of the input user authentication information by referring to the user authentication database; and said filter key providing function unit has: a filter key assigning table holding said filter key

assigned in advance corresponding to user authentication information, and a filter key sending unit for sending a corresponding filter key from the filter key assigning table to the user when the veracity is confirmed (Arrow col. 12 line 2 to 63 shows an embodiment where the authentication data is readily stored in the Address Translation Unit, where the data is used to authenticate the user (Also see Arrow claim 4). Arrow Fig 4 and 5 show use of a database to store information processed by the system, and a command module for executing commands received. A database stored information in tables, and once queried for a data item searches the tables for a match and provides the queried information. Note that to perform authentication, the authentication information must be stored and made available to the authenticating system).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Farid Homayounmehr whose telephone number is 571 272 3739. The examiner can normally be reached on 9 hrs Mon-Fri, off Monday biweekly.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

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applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Farid Homayounmehr

Examiner

Art Unit: 2439

/Michael J Simitoski/  
Primary Examiner, Art Unit 2439